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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,733	11/21/2001	Gregory D. Johnson	13190.101	9460
24283	7590	01/26/2005	EXAMINER	
PATTON BOGGS 1660 LINCOLN ST SUITE 2050 DENVER, CO 80264			AUGHENBAUGH, WALTER	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/993,733

Applicant(s)

JOHNSON, GREGORY D.

Examiner

Walter B Aughenbaugh

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-20, 22-28 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20, 22-28 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1772

**DETAILED ACTION**

1. Applicant's Response to Office Action Mailed 08/04/2004 filed November 4, 2004, the NOVEMBER 4, 2004 DECLARATION OF GREGORY D. JOHNSON and the NOVEMBER 4, 2004 DECLARATION OF CARL A. FOREST have been received and considered by Examiner.

***REPEATED OBJECTIONS***

2. The objection to claim 43 made of record in paragraph 4 of the previous Office Action mailed August 4, 2004 has been repeated for the reasons previously made of record.

***REPEATED REJECTIONS***

3. The 35 U.S.C. 103(a) rejections of claims 1-12, 14-20, 22-28 and 39-42 made of record in paragraphs 7-13 of the previous Office Action mailed August 4, 2004 have been repeated for the reasons previously made of record.

***RESPONSE TO NOVEMBER 4, 2004 DECLARATION OF GREGORY D. JOHNSON***

4. The statements and arguments presented in the NOVEMBER 4, 2004 DECLARATION OF GREGORY D. JOHNSON have been fully considered but are not persuasive.

The statements that Symons Corporation is performing expensive tests on Applicant's panel (paragraphs 7-11), that Applicant's panel is being presented and sold at the World of Concrete show in January (paragraph 12) and that Applicant's panel will result in "significantly more profits" (paragraphs 16-19) do not overcome the 35 U.S.C. 103(a) rejection of claims 1-12, 14-17, 22, 25-28 and 39-42 over Sobolev in view of Fitzgerald et al. made of record in paragraph 7 of the previous Office Action mailed August 4, 2004 because these statements do not present data that proves that the claimed steel/HDPE/metal laminate provides unexpected results over those of the steel/resin/metal laminate taught by Sobolev. Applicant has not met the burden on

Art Unit: 1772

Applicant to establish that these results are unexpected and significant in that the evidence relied upon does not establish “that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance” *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Furthermore, the claimed invention has not been compared with the closest prior art which is commensurate in scope with the claims as required by MPEP 716.02(b). As stated in paragraph 14 of the previous Office Action mailed August 4, 2004,

The “closest prior art which is commensurate in scope with the claims” is the panel obtained from the proposed modification of the Sobolev panel as made of record in the 35 U.S.C. 103 rejection of claims 1-12, 14-17, 22, 25-28 and 39-42 (paragraph 16 of Paper 5). If this is not attainable, the panel taught by Sobolev would be the closest prior art; Sobolev explicitly teaches a panel for concrete pouring forms having all of the limitations claimed in claim 1 except that the plastic core is high density polyethylene (HDPE) as made of record in paragraph 16 of Paper 5 (i.e. Sobolev does not explicitly teach that the plastic core is HDPE). Note that the teachings of Sobolev do not exclude HDPE from the scope of materials for the resin core. An effective Declaration would present data that proves that the claimed steel/HDPE/metal laminate provides unexpected results over those of the steel/resin/metal laminate taught by Sobolev.

The relevance of the statement that the test results of Sobolev and of Mr. Rahe “are not directly comparable” made in paragraph 15 of the Declaration is not explained in the Declaration.

***RESPONSE TO NOVEMBER 4, 2004 DECLARATION OF CARL A. FOREST***

5. The statements and arguments presented in the NOVEMBER 4, 2004 DECLARATION OF CARL A. FOREST have been fully considered but are not persuasive.

The comparison between steel and aluminum in paragraphs 4-17 of the Declaration is off point because the panel that Applicant compares to Applicant’s panel, the “German ½” panel, is not the closest prior art which is commensurate in scope with the claims because it does not include steel, as was stated in paragraph 14 of the previous Office Action mailed August 4, 2004. Applicant claims a steel facing layer, and Sobolev teaches steel.

Art Unit: 1772

The comparison between the “German ½-inch” panel and Applicant’s panel (McCormick 3/8-inch” panel) in paragraphs 18-20 of the Declaration is off point because the “German ½” panel is not the closest prior art which is commensurate in scope with the claims because it does not include steel, as was stated in paragraph 14 of the previous Office Action mailed August 4, 2004. In regard to the 10% difference between the “German ½-inch” panel and Applicant’s panel discussed in paragraph 19 of the Declaration, as stated in paragraph 14 of the previous Office Action mailed August 4, 2004,

the 10% difference is a difference in plywood deflection between the German ½” aluminum/ “epoxy-type plastic” and a 3/8” steel/HDPE/metal laminate of the invention (the McCormick 3/8” panel is supposedly a steel/HDPE/metal laminate since this structure is claimed as the invention). While “10% is a significant difference to one skilled in the art of concrete formwork panels” as is stated in paragraph 14 of the Supp. Dec., this difference is irrelevant to the instant application since the McCormick panel is not being compared with the closest prior art which is commensurate in scope with the claims as discussed above; Sobolev teaches a steel/resin/metal laminate.

The statement in paragraph 20 of the Declaration that “the McCormick panel is at least 30% better than one would expect based on Sobolev” is speculative and is not supported with data collected by Applicant.

The statement in paragraph 22 of the Declaration that “Apparently, no such panels [as taught by Sobolev] are made” is irrelevant. Sobolev teaches the Sobolev panels and a method of making them, so one of ordinary skill in the art can make the Sobolev panels for the purpose of comparing the Sobolev panel with Applicant’s panel.

### ***ANSWERS TO APPLICANT’S ARGUMENTS***

6. Applicant’s arguments presented on page 9 of Applicant’s Response to Office Action Mailed 08/04/2004 filed November 4, 2004 regarding the 35 U.S.C. 103 rejection of claim 18 have been fully considered but are not persuasive. Applicant’s statement that “resistance to crush

Art Unit: 1772

is not a problem, since the single-thickness panel is sufficiently crush resistant” is unsupported.

One of ordinary skill in the art would have recognized to have formed the panel as claimed in claim 18 in order to improve the crush resistance of the panel as taught by Toedter.

7. Applicant’s arguments presented on pages 6-11 of Applicant’s Response to Office Action Mailed 08/04/2004 filed November 4, 2004 regarding the 35 U.S.C. 103 rejection of claims 1-12, 14-17, 22, 25-28 and 39-42 have been fully considered but are not persuasive.

Applicant states the metal/plastic laminate that is included in Exhibit C is the closest prior art, but it is not the closest prior art for the reasons provided in this Office Action. Applicant argues that if Exhibit C does not include the panel of Sobolev, “the only conclusion is that the panel of Sobolev was never used as a concrete formwork panel”, but (1) 35 U.S.C. 102 rejection as being anticipated by Sobolev is not of record and (2) Sobolev teaches a panel for concrete pouring forms (i.e. a concrete formwork panel). The effectiveness of the data presented in Exhibit C was addressed in this Office Action and in previous Office Actions.

Applicant argues that “the disclosure of steel is minimal”, but this argument is irrelevant; Sobolev discloses steel as a suitable material for the facing layer. Applicant misrepresents Examiner’s position provided on pages 2-4 of Paper 9 on page 7 of Applicant’s Response to Office Action Mailed 08/04/2004 filed November 4, 2004 wherein it is not “suggest[ed] that a steel panel made with a ‘slightly more flexible epoxy resin’ would not fail” as Applicant alleges. The 9<sup>th</sup>-14<sup>th</sup> lines of page 3 of Paper 9 state that “absolutely nothing can be inferred from Sobolev’s teachings as to which metal (steel or aluminum) is the superior material in terms of core cracking” because Sobolev does not report a test with a panel comprising steel and the “slightly more flexible epoxy resin”: this is not a suggestion that “a steel panel made with a

Art Unit: 1772

‘slightly more flexible epoxy resin’ would not fail” as Applicant alleges is suggested. The point is that Sobolev teaches that “steel/plastic panels” perform equally as well as “aluminum/plastic panels” as discussed on pages 2-4 of Paper 9; therefore, one of ordinary skill in the art would be led to pursue “steel/plastic panels” as much as “aluminum/plastic panels” based on the teachings of Sobolev discussed in pages 2-4 of Paper 9. The argument regarding the “slight cracking” teaching is irrelevant as explained in the Response to the Supp. Dec. section of the Office Action mailed May 20, 2004.

Applicant argues that one of ordinary skill in the art would not have been motivated to combine Sobolev and Fitzgerald et al. since “Fitzgerald et al. does not disclose a concrete formwork panel but a mold”, but as made of record in at least paragraph 16 of Paper 5, Fitzgerald et al. discloses that HDPE is a material of suitable rigidity for use in concrete form mold panels (col. 2, lines 10-12 and col. 3, lines 4-15), so one of ordinary skill in the art of panels used for construction with concrete would be familiar with HDPE as a suitable plastic for panels.

Applicant argues that *In re Boesch* does not apply to the instant case because “the values claimed are outside the ranges in the prior art”, but as stated in previous Office Actions, the 30% value mentioned by Sobolev is not an endpoint of a range as presented by Sobolev.

In regard to Applicant’s arguments on pages 10-11 of Applicant’s Response to Office Action Mailed 08/04/2004 filed November 4, 2004 regarding the rejection of claims 39-41, Applicant argues that Examiner’s statement initially made in Paper 9 that Sobolev teaches variation of the volume of gas per unit volume of the core layer is not true. However, the teaching of Sobolev that Applicant cites is not relied upon in the rejection made of record in



Art Unit: 1772

paragraph 21 of Paper 5; the teaching that Applicant cites, that is at col. 22, lines 13-15, is not cited in paragraph 21 of Paper 5. The basis for Examiner's statement that Sobolev teaches variation of the volume of gas per unit volume of the core layer is provided in paragraph 21 of Paper 5 and is reproduced below:

However, Sobolev teach that a filler is used in the plastic (resin) core layer of the panel to lower the density of the core and that the filler is a foaming agent or blowing agent conventionally used to foam various resins as known by those skilled in the art or glass microballoon filler having an average diameter of from about 20 microns to about 12 mm (col. 12, lines 3-16). Sobolev teaches that for lower density cores and lighter weight laminates, the microballoons and foaming agents are the preferred density lowering agents. Sobolev teach that the specific gravity of the resin core, which is equivalent to the density of the core layer, should be set in a range from about 0.8 to about 1.3. Sobolev teaches the variation of the density of the core layer via routine experimentation via control of the volume of gas per unit volume of the core layer via use of glass microballoons of a given size or of foaming agents conventionally used to foam resins known by those skilled in the art. It would have therefore been obvious to one of ordinary skill in the art at the time the invention was made to have varied the size of the microballoon filler, and therefore the "gas by volume" value of the foam plastic, or to have experimented with different foaming agents and different amounts of a given foaming agent as known by those of ordinary skilled in the art as taught by Sobolev, via routine experimentation in order to achieve the optimal "gas by volume" amount as claimed by Applicants, i.e. volume of gas per unit volume of the core layer expressed as a percentage, that achieves the desired laminate weight depending on the desired end result as taught by Sobolev, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The statement "In a number of cases, core density reductions of 30% were readily achieved without loss of important laminate properties" (col. 22, lines 22) does not necessarily "indicate[] that, in the majority of cases, important laminate properties were lost" as Applicant argues and does not necessarily "impl[y] that, in the range above the core reductions of 30%, important laminate properties were lost in all cases" as Applicant argues. The specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to resin comprising microballoons and also foamed resin (that is foamed with a foaming agent or a blowing agent) because Sobolev considers each of foaming agents, blowing agents and microballoons to be a filler (col. 12, lines 3-6), and Sobolev teaches that the specific gravity range of the "filled resin core" is about 0.8 to about 1.3



Art Unit: 1772

(col. 12, lines 6-8). Sobolev also teaches that both microballoons and foaming agents are preferred (col. 12, lines 36-38). Applicant's argument that "only one example of a foam plastic gas by volume is given in Sobolev" is therefore moot because the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to foamed resin for the reasons provided above. Applicant's arguments regarding the 26% value are moot because the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to foamed resin for the reasons provided above. The comments made in the paragraph bridging pages 10 and 11 of Applicant's Response to Office Action Mailed 08/04/2004 filed November 4, 2004 have been addressed in the Response to the Supp. Dec. section of the Office Action mailed May 20, 2004.

8. Applicant's "Responses To The Examiner's 'Responses'" presented on pages 11-13 of Applicant's Response to Office Action Mailed 08/04/2004 filed November 4, 2004 have been fully considered but are not persuasive.

Applicant incorrectly argues that MPEP 716.02(b) "says nothing about what the comparison should be made against". MPEP 716.02(b) is divided into three sections (I, II and III). The "the closest prior art which is commensurate in scope with the claims" phrase that Applicant argues is not in MPEP 716.02(b) is in section III of MPEP 716.02(b).

Applicant argues that Applicant's panel cannot be compared with the panel of Sobolev "because the deflection measurement used in Sobolev is a three-point test [not the test Mr. Rahe used on Applicant's panel]", but Sobolev teaches the Sobolev panels and a method of making them, so one of ordinary skill in the art can make the Sobolev panels for the purpose of comparing the Sobolev panel with Applicant's panel.

Art Unit: 1772

Applicant argues that Applicant's panel cannot be compared with the panel of Sobolev "because the Sobolev panels do not exist", but Sobolev teaches the Sobolev panels and a method of making them, so one of ordinary skill in the art can make the Sobolev panels for the purpose of comparing the Sobolev panel with Applicant's panel.

Applicant argues that "the Examiner mixes the experimentation of Sobolev on microballoons with the experiments on foaming agents", but the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to resin comprising microballoons and also foamed resin (that is foamed with a foaming agent or a blowing agent) because Sobolev considers each of foaming agents, blowing agents and microballoons to be a filler (col. 12, lines 3-6), and Sobolev teaches that the specific gravity range of the "filled resin core" is about 0.8 to about 1.3 (col. 12, lines 6-8). Sobolev also teaches that both microballoons and foaming agents are preferred (col. 12, lines 36-38). Applicant's argument that the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies only to microballoon-filled resin is incorrect because the specific gravity range taught by Sobolev of about 0.8 to about 1.3 also applies to foamed resin (that is foamed with a foaming agent or a blowing agent) for the reasons provided above.

Applicant incorrectly states on page 13 of Applicant's Response to Office Action Mailed 08/04/2004 filed November 4, 2004 that "Examiner's position is that since Sobolev experimented with a percentage of 26% of gas per volume, experimentation above this range is obvious": Examiner does not rely upon a "gas per volume" value of 26%. Examiner relies upon the specific gravity range taught by Sobolev of about 0.8 to about 1.3 that applies to foamed resin (that is foamed with a foaming agent or a blowing agent) for the reasons provided above.

Art Unit: 1772

Applicant states on page 13 of Applicant's Response to Office Action Mailed 08/04/2004 filed November 4, 2004 that "Sobolev states that chemical blowing agents appear to be less effective in retaining impact resistance (which is related to deflection)" at col. 22, lines 67 and 68 (the full statement at col. 22, lines 67 and 68 is "Chemical blowing agents appear to be less effective in retaining impact resistance as core density is reduced"), but Applicant's argument regarding Sobolev's statement at col. 22, lines 67 and 68 is irrelevant because the panel of Sobolev and of Applicant has metal facing and backing layers, so the impact resistance of the foam plastic core is not of concern since it is covered by the facing and backing layers. The degree of difficulty in fabricating an article is irrelevant to the patentability of the article itself. For the reasons provided above, the specific gravity range taught by Sobolev of about 0.8 to about 1.3 applies to foamed resin, and therefore, it is appropriate to use this range to establish that optimization of the gas by volume percentage of the resin, depending on the desired end result, would have been obvious to one of ordinary skill in the art. Sobolev teaches the specific gravity range of about 0.8 to about 1.3 for foamed resin, not only the 26% value that Applicant cites.

Commercial success is a factor that should be considered if Applicant submits evidence of commercial success according to MPEP 716.01 and 716.03, but Applicant has not provided evidence of commercial success. Applicant's November 4, 2004 Declaration does not state that any of Applicant's panels have been sold commercially. Paragraph 12 of Applicant's November 4, 2004 Declaration states that Applicant's panel will be presented and sold at the World of Concrete show in January, but Applicant has not provided evidence that any of Applicant's panels were sold commercially prior to the date of the Declaration (November 4, 2004).

Art Unit: 1772

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

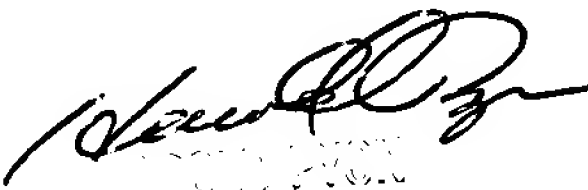
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1772

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh  
01/18/05

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